

126139-1

CLAIMS

1. (currently amended) A thermoplastic resin composition ~~consisting essentially of comprising~~

~~a thermoplastic resin selected from the group consisting of a polyphenylene ether resin, a polystyrene resin, an acrylonitrile butadiene styrene resin, and mixtures thereof, and a~~
polyphenylene ether;

a polystyrene;

a flame retardant composition consisting essentially of an organo phosphate in an amount less than or equal to about 20 parts by weight for every 100 parts by weight of the thermoplastic resin, and a polyhydric alcohol in an amount of about 0.25 to about 5.0 parts per weight for every 100 parts by weight of the thermoplastic resin.

2. (previously presented) The thermoplastic resin composition of Claim 1, wherein the polyhydric alcohol is a pentaerythritol in an amount of about 0.5 to about 2.0 parts per for every 100 parts by weight of the thermoplastic resin.

3. (previously presented) The thermoplastic resin composition of Claim 2, wherein the pentaerythritol is in an amount of about 1.0 parts per weight for every 100 parts by weight of the thermoplastic resin.

4. (canceled)

5. (currently amended) The thermoplastic resin composition of Claim 1, ~~wherein the thermoplastic resin consists essentially of the polyphenylene ether resin and~~ the polystyrene comprises a high impact polystyrene resin.

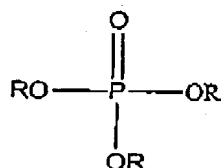
6. (original) The thermoplastic resin composition of Claim 1, further comprising at least one additive selected from the group consisting of drip retardants, dyes, pigments, flow enhancers, impact modifiers, colorants, reinforcing agents, fillers, glass fibers, stabilizers, antistatic agents, plasticizers and lubricants.

126139-1

7. (original) The thermoplastic resin composition of Claim 1, wherein the polyhydric alcohol is selected from the group consisting of pentaerythritol, dipentaerythritol, tripentaerythritol, pentitols, hexitols, and saccharides.

8. (previously presented) The thermoplastic resin composition of Claim 1, wherein the organo phosphate is selected from the group consisting of resorcinol bis(diphenylphosphate) and bisphenol A-bis(diphenylphosphate).

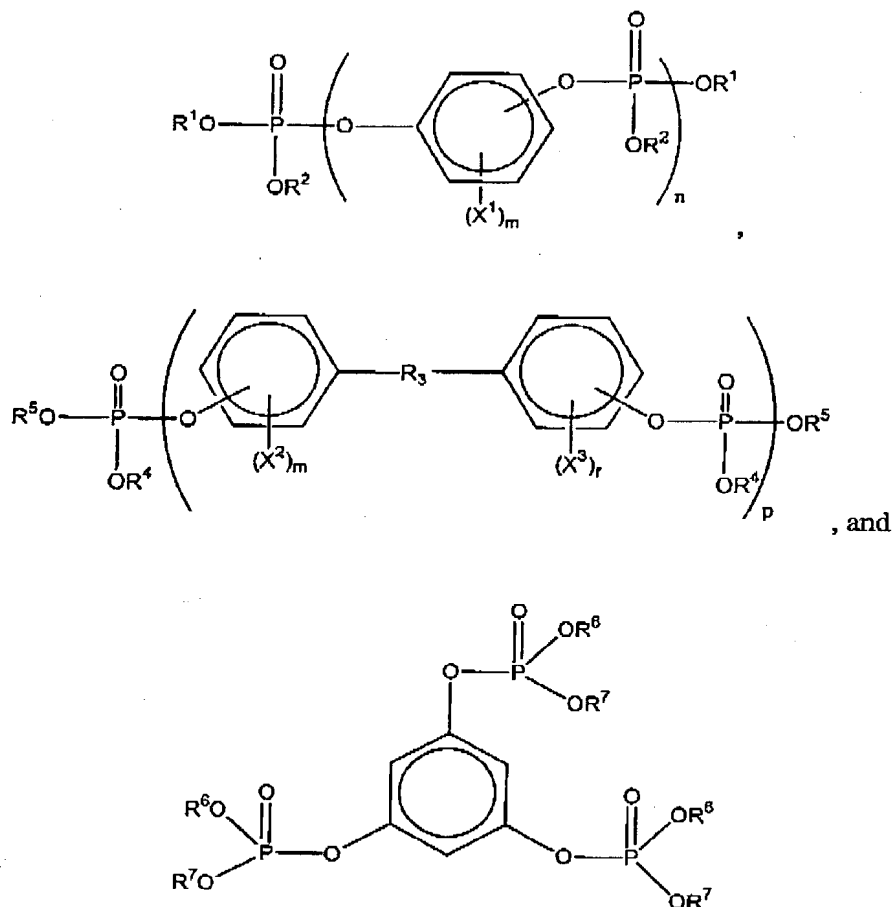
9. (previously presented) The thermoplastic resin composition of Claim 1, wherein the organo phosphate comprises formula:



wherein R is the same or different and is an alkyl, cycloalkyl, aryl, alkyl substituted aryl, halogen substituted alkyl, aryl substituted alkyl, halogen, or a combination of any of the foregoing, provided at least one R is aryl.

126139-1

10. (previously presented) The thermoplastic resin composition of Claim 1, wherein the organo phosphate is a compound of a formula selected from the group consisting of:



wherein $R^1, R^2, R^3, R^4, R^5, R^6$, and R^7 are independently, a hydrocarbon of C1 to C20, an aryl, an alkyl-substituted aryl; X^1, X^2 , and X^3 are halogen; m and r are 0 or integers from 1 to 4, and n and p are from 1 to 30, and wherein when m and/or r are 0, the aromatic rings contain hydrogen without halogen substitution.

126139-1

11. (currently amended) A thermoplastic resin composition consisting essentially of:

~~a thermoplastic resin selected from the group consisting of a polyphenylene ether resin, a high impact polystyrene resin, an acrylonitrile-butadiene-styrene resin, and mixtures thereof, and~~
a polyphenylene ether;

a polystyrene;

a flame retardant composition consisting essentially of a resorcinol bis(diphenyl phosphate) compound in an amount less than or equal to about 20 parts by weight for every 100 parts by weight of the thermoplastic resin, and a polyhydric alcohol compound in an amount of about 0.25 to about 5.0 parts by weight for every 100 parts by weight of the thermoplastic resin.

12. (original) The thermoplastic resin composition of Claim 11, wherein the polyhydric alcohol is selected from the group consisting of pentaerythritol, dipentaerythritol, tripentaerythritol, pentitols, hexitols, and saccharides.

13. (original) The thermoplastic resin composition of Claim 11, wherein the polyhydric alcohol is in an amount of about 0.5 to about 2.0 parts per weight for every 100 parts by weight of the thermoplastic resin.

14. (original) The thermoplastic resin composition of Claim 11, wherein the polyhydric alcohol in is an amount of about 1.0 parts per weight for every 100 parts by weight of the thermoplastic resin.

15. (previously presented) A flame retardant article comprising the composition of Claim 11, wherein the flame retardant composition has a VO flame rating at a thickness of 1.6 millimeters as measured in accordance with UL-94.

126139-1

16. (currently amended) A method for the manufacture of a flame retardant thermoplastic resin composition extrudate with improved flowability and Izod impact strength, said method comprising:

~~mixing a thermoplastic resin selected from the group consisting of a polyphenylene ether resin[[,]] and a high impact polystyrene resin[[,]] an acrylonitrile-butadiene-styrene resin, and mixtures thereof~~ with a flame retardant composition consisting essentially of an organo phosphate compound and a polyhydric alcohol compound to form a flame retardant mixture, wherein the organo phosphate compound is in an amount less than or equal to about 20 parts by weight for every 100 parts by weight of the thermoplastic resin, and wherein the polyhydric alcohol is in an amount of about 0.25 to about 5.0 parts by weight for every 100 parts by weight of the thermoplastic resin, and wherein the mixture consists essentially of the thermoplastic resin, the organo phosphate compound, and the polyhydric alcohol; and

extruding the mixture to form the extrudate.

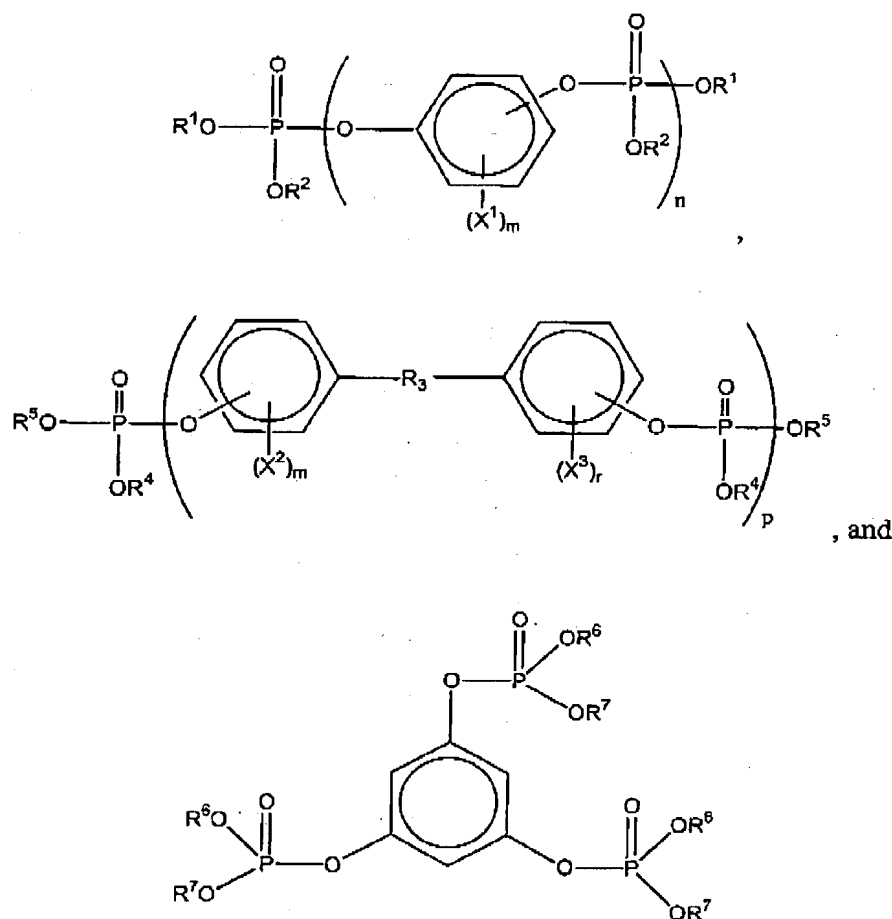
17. (original) The method of Claim 17, wherein the polyhydric alcohol is selected from the group consisting of pentaerythritol, dipentaerythritol, tripentaerythritol, pentitols, hexitols, and saccharides.

18. (original) The method of Claim 17, wherein organo phosphate is in an amount of about 1.0 to about 1.5 parts per weight for every 100 parts by weight of the thermoplastic resin.

19. (previously presented) The method of Claim 17, wherein the organo phosphates compound is selected from the group consisting of resorcinol bis(diphenylphosphate) and bisphenol A-bis(diphenylphosphate).

126139-1

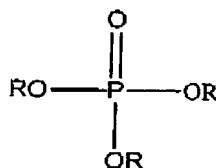
20. (previously presented) The method of Claim 17, wherein the organo phosphate is a compound of a formula selected from the group consisting of:



wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , and R^7 are independently, a hydrocarbon of C1 to C20, an aryl, an alkyl-substituted aryl; X^1 , X^2 , and X^3 are halogen; m and r are 0 or integers from 1 to 4, and n and p are from 1 to 30, and wherein when m and/or r are 0, the aromatic rings contain hydrogen without halogen substitution.

126139-1

21. (previously presented) The method of Claim 17, wherein the organo phosphate is of formula:



wherein R is the same or different and is an alkyl, cycloalkyl, aryl, alkyl substituted aryl, halogen substituted alkyl, aryl substituted alkyl, halogen, or a combination of any of the foregoing, provided at least one R is aryl.

22. (previously presented) A thermoplastic resin composition consisting essentially of:

a polyphenylene ether resin;

a polystyrene resin; and

a flame retardant composition consisting essentially of an organo phosphate in an amount less than or equal to about 20 parts by weight for every 100 parts by weight of the thermoplastic resin, and a polyhydric alcohol in an amount of about 0.25 to about 5.0 parts per weight for every 100 parts by weight of the thermoplastic resin.